

Attachment 2

Increment 4 Payload Resource Requirements Payload Planning Data Set (I – 12 months)

iURC Data Below Based on Rev F Assembly Sequence

Payload (by RPO)	Total Energy (kWh)	Total Crew (hrs)	Length of Operation
Crew Earth Obs	0.00	58.33	5 days/week during Increment 4
EarthKAM	14.40 (UOP)	3.00	Two 4-day performances during Increment 4
Code M Totals	14.40	61.33	
BPS	213.00	46.50	8A-UF2, 37 days continuous (xfer on FD5). Includes 2.5 hr crew time for STS crew performing ISS ops (first PGC-1 and PGC-2 Gas Calibration and Samples)
FB Totals	213.00	46.50	
EVARM	1.00(UOP)	16.42	PRE-/POST-EVA during I4, assumes 5 ISS EVAs
HRF	81.59(Rack)	36.92	Periodically throughout Increment 4 (Rack energy includes WS/USND/GASMAP)
H-REFLEX	0.74(UOP)	14.42	3 performances during Increment 4
NTXN	3.75(UOP)	71.92	Weekly during Increment 4
PuFF	0.63(UOP) 116.65(Rack)	108.58	Monthly & PRE-/POST EVA during I4, assumes 5 ISS EVAs (Rack energy includes GASMAP/PuFF)
RENAL STONE	0.12(UOP)	41.07	Continuously during Increment 3
HLS Totals	204.48	289.33	
MSG	70.96 (SB*)	9.58 (PD*)	Represents worst case energy and crew numbers between 2 possible scheduling sequences.
BSTC	53.92	19.42	2-week operation to start no later than UF-1 launch +11 days.
BTR	565.92	9.83	Continued ops from inc 3; deactivate after contents are transferred to STS for 8A descent.
DCPCG	677.3	2.08	Operates continuously from UF-2 to 9A. Values calculated from UF-2 to 3 Soyuz undock.
PCG-EGN	0.00	2.25	Stage 8A only.
PCG-STES (007)	154.29	3.83	Operates continuously from UF-2 to 9A. Values calculated from UF-2 to 3 Soyuz undock.
PCG-STES (008)	154.29	3.83	Operates continuously from UF-2 to 9A. Values calculated from UF-2 to 3 Soyuz undock.
PCG-STES (009)	450.70	8.08	Stages UF-1 through 8A
PCG-STES (010)	450.70	8.08	Stages UF-1 through 8A
EXPPCS	554.40	10.17	Stages UF-1 through 8A.
MAMS	65.55	1.50	4 day operations every 3 weeks + 1 day ops during reboosts and dockings on Inc 4.
SAMS II	398.38	1.83	Continuous ops on Inc 4.
MRPO Totals	3596.41	80.48	
ADVASC-02	503.01	13.50	UF-1 – UF-2, 67 days continuous
ADVASC-03	414.80	10.00	UF-2 – Inc 5 9A, 67 days continuous (ADVASC-03 resource usage for Inc 4 estimated for 54 days)
CGBA-03	124.80	7.25	8A – UF-2, continuous (CT total only 4.92 hrs for true requirement of twice weekly status checks)
CGBA-04	168.48	9.58	UF-2 – Inc 5 9A, continuous (CGBA-04 resource usage for Inc 4 estimated for 54 days. CT total only 6.42 hrs for true requirement of twice weekly status checks)

CGBA-05	168.48	9.17	UF-2 – Inc 5 9A, continuous (CGBA-05 resource usage for Inc 4 estimated for 54 days. CT total only 6.00 hrs for true requirement of twice weekly status checks)
CPCG-H-01	77.01	4.67	8A – UF-2, continuous
Payload (by RPO)	Total Energy (kWh)	Total Crew (hrs)	Length of Operation
CPCG-H-02	77.01	4.67	8A – UF-2, continuous
MEPS	2.40	6.58	UF-1 – 8A, non-continuous, 10 PCMs
Space-DRUMS	58.97	10.00	UF-2 – Inc 6 ULF-1, non-continuous, 10 Carousels (Space-DRUMS resource usage for Inc 4 assumes all 10 Carousels processed before Inc 5 begins)
ZCG-01	122.06	8.42	8A – UF-2, 26 days, continuous
ZCG-02	122.06	8.42	UF-2 – Inc 5 9A, 26 days, continuous (ZCG-02 resource usage for Inc 4 assumes processing completed before Inc 5 begins)
SKYSAT	TBD	TBD	
SPD Totals	1839.08	92.26	
ARIS (ER2)	0.00	1.08	Power tracked by ER2; crew required for 2 reconfigs, 2 guide installs, and 1 guide remove for ZCG ops
EXPRESS 1	1872.00	1.42	UF-1 – end of inc continuous power, Deactivation and Activation for on-orbit move
EXPRESS 2	2808.00	0.00	UF-1 – end of inc continuous power
EXPRESS 3	0.00	0.00	No ops during Inc 4
EXPRESS 4	1872.00	0.00	UF-1 – end of inc continuous power
EXPRESS 5	518.40	0.67	UF-2 – end of inc continuous power, Activation after UF-2
TBD FREEZER	TBD	TBD	
Support Totals	7070.40	3.17	
TOTALS	12937.77	573.07	TOTAL UTILIZED BY IURC REQUIREMENTS
	60529.00	1141.50	IDRD ALLOCATIONS (PP3 IDRD, Rev B, Nov 2000)
	+47591.23	+568.43	MARGIN